

1. Log on to **Scratch** <http://scratch.mit.edu/>, Select “**Try it out**” and upload your file.
2. First we need to find a place to **keep track of the score**.
  - 2.1. Create two global **variables** called **Score** and **High Score**.
  - 2.2. Set **Score** to zero in the Stage’s **On Green Flag Handler**.
  - 2.3. In the **Ball’s forever loop** where the **Exit** code is, check to see if **Score** is greater than **High Score**. If it is, replace **High Score** with the new value.
3. **Create a score spot** that changes colors **when the ball is touching** it, and changes back to its original color after the ball has moved on. The spot will also add points each time it is touched.
  - 3.1. Create a new **sprite** and give it any shape you’d like.
  - 3.2. Make a second costume for the sprite that looks different in some way.
  - 3.3. Add code to this sprite’s green flag handler to have it continually check if it is touching the ball. **If they are touching**, use the 2<sup>nd</sup> costume **and** add points, if not, use the first costume.
4. In this step we will modify a peg or kicker (your choice) so that **it changes colors for one or two seconds** when it is hit. This sprite can also add points.
  - 4.1. Add a second costume to one of your pegs or kickers.
  - 4.2. Add a “**When Green Flag Clicked**” handler to the peg or kicker to set its initial appearance.
  - 4.3. Add a “**When I receive message**” event handler to the sprite and change the message to something that makes sense for this sprite (Example: Peg1 Hit).
  - 4.4. In the message handler change the appearance of the sprite, play a sound and add points to the score.
  - 4.5. Include a “wait \_\_\_ seconds” command before changing the sprite back to its original appearance
  - 4.6. Test and debug this code.
5. Clean-up
  - 5.1. Add more score spots, changing pegs, kickers or walls.
  - 5.2. **Add sounds** to each object that makes sense. When a peg or wall is hit, there should be some sort of a click. When a score spot is hit it should react with a sound. Similarly with kickers and flippers.
  - 5.3. Adjust gravity and friction to keep the ball movement looking natural.

6. Test out your new game.
7. Save your work and submit it to Canvas (Pinball #7).

**Rubric:**

- Display current score that resets when the green flag is hit. (1 point)
- Display a High Score that is updated while the game is playing. (1 point)
- Score spot that changes appearance and adds to score while the ball is touching it. (2 points)
- Peg or other obstacle that changes appearance and adds to score when **hit**. (2 points)
- Sounds or other interesting effects (2 points)
- Game plays and feels reasonable (2 points)